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GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING



LIESL EICHLER CLARK
DIRECTOR

February 9, 2021

VIA E-MAIL

Mr. Tim Burkman
300 Monroe Avenue Northwest
Grand Rapids, Michigan 49503

Dear Mr. Burkman:

SUBJECT: Second Correction Request
Submission No. HNV-A018-7X9N3
County: Kent
Site Name: Grand River-Grand Rapids
Project Name: Grand Rapids Revitalization Project – RCPP Reach

The Department of Environment, Great Lakes, and Energy (EGLE), Water Resources Division (WRD), has received and reviewed your application and first correction request response documents. Based on the review, the application has been determined to be incomplete as received and cannot be further processed until the information requested below has been submitted.

Item 1: Dimensions (length x width x depth) and volumes (in cubic yards)

There are some remaining discrepancies between the impact plans and the tables in the Joint Permit Application (JPA) beyond those included above. Please correct the dimensions as needed so JPA and plan impacts match.

- a) Correct the discrepancy between the T6 impact length in the JPA Table which lists the length as 76 feet and the plans which list the length 96 feet.
- b) Correct the discrepancy between the P4 impact length in the JPA dredge table which lists the length as 268 feet and the plans which list the length at 286 feet.
- c) Correct the discrepancy between the T2 impact length in the JPA Table which lists the length as 379 feet and the plans which show two segments of 288 and 379 feet a total length of 667 feet.
- d) Correct the discrepancy between the T10 impact length in the JPA table which lists the length as 932 feet and the plans which appear to show an additional 140 feet on the north end of T10 and unlabeled length on the south end of T10 spanning the match line between sheets 10 and 17.
- e) Account for all fill in the proposed boulder gardens in the JPA tables and plans per recommendation 3C below.

Item 2: Project plans

Grading tolerances for proposed in stream structures need to be better defined in the project plans and specifications. If bedform/flow diversity is a desired design feature for the structures, then the plans and associated modeling should show maximum design elevations at all locations. Some variation in elevation is inherent in large, poorly graded material, but no significant portion of any structure should be constructed above design elevation, even if the average elevation is within an allowable tolerance. Plans and specifications should be revised to show the following:

- a) Maximum construction elevations of proposed structures at all locations with no (0.0 ft) vertical tolerance above design grades.
- b) Minimum construction elevations of proposed structures as all locations with smaller (0.3 ft) vertical tolerance below design grades.
- c) All other desired grade variations, placed boulders, etc. that would fall outside of these tolerances should be detailed in the plans and specifications and accounted for in hydraulic models.

Item 3: Cross-sections

- a) Provide additional cross-sections and details for cofferdam arms at the north and south ends of each work area which are not depicted in any East-West cross section views. A5, A14, and A19- A21 are each located just beyond the impact area of these cofferdam arms. Please provide cross sections that depicts the entire cross-sectional area of the channel for each of these three locations.
- b) Revise cross section A20 to depict detailed variations in fill in the proposed boulder garden.
- c) Provide an east-west cross section through impact area P8. Cross section A17 only depicts the eastern area of impact associated with P8.
- d) Revise cross sections A13 and A14 to depict detailed cut and fill in impact area T10.

Item 4: Organization of documents

Review staff continue to have difficulty navigating several of the large reports and documents provided with the application. Many of the reports are several hundreds, and some even thousands, of pages long. Without adequate citation within the reports and cataloguing of the appendices, it is difficult for review staff to efficiently navigate and locate pertinent analyses related to the various sections contained in the reports.

- a) For all reports, provide frequent and adequate referencing and citations of all studies, analyses, reports, etc. contained in the appendices and relied upon in drafting the report.
- b) Provide adequate tables of contents, lists of figures, lists of appendices, etc. such that staff can easily navigate and efficiently review these documents. When an appendix contains multiple documents, list of appendices should specify all documents contained within each appendix and provide corresponding page numbers for each of the individual documents contained in that appendix.

Item 5: Feasible and prudent alternatives

State and Federal regulations require the evaluation of feasible and prudent alternatives, and that a permit cannot be issued unless a feasible and prudent alternative that would result in fewer adverse impacts is not available. The stated project purpose cannot be so narrowly defined as to preclude any alternative but the applicant's preferred alternative. The applicant must demonstrate that the selected alternative avoids impacts to the maximum extent practicable. Impacts that cannot be avoided must be minimized, and any adverse impacts that remain after avoidance and minimization must be adequately compensated for through provision of an appropriate mitigation plan that documents the replacement of any lost functions and values of the impacted resources.

The enclosed 2019 Environmental Impact Statement (EIS) Scoping comment letter for the proposed future project at the upper reach of the Grand River in downtown Grand Rapids provides recommendations for alternatives to be evaluated during the National Environmental Policy Act (NEPA) process for that project. This document was provided to the project partners during the public comment period for the EIS. Though, not specifically drafted for the lower reach, Regional Conservation Partnership Program (RCPP) project, many of the recommendations in the letter directly translate to the proposed RCPP project.

a) Definition of Project Purpose

- i) Section 2 of the Watershed Project Plan – Environmental Assessment (WPP-EA) states that, “The Purpose of the Project is to: 1) restore aquatic habitat diversity and suitability for native Great Lakes drainage fish and mussel species, especially threatened, endangered, and special concern native species, in the Grand River from 130 feet upstream of Bridge Street to Fulton Street; 2) reduce or eliminate public safety hazards generated by the existing low-head dams; and 3) install diversified hydraulic features that would improve aquatic habitat and scenic resources in the Grand River.” Inclusion of item #3 in the definition of project purpose precludes any alternative that does not include installation of hydraulic features. Though two alternatives are explored in Section 5 of the WPP-EA that would not include installations of hydraulic features, both were eliminated from considerations stating reasons provided later in this letter. These alternatives need to be fully evaluated as potential feasible and prudent alternatives. The project purpose needs to be redefined so that it does not limit or predetermine feasible and prudent alternatives. A revised alternatives analysis must be provided which evaluates alternatives without installation of hydraulic features as discussed in Item 5(b) below.

Analysis of feasible and prudent alternatives must be consistent with the scale and potential impact of the proposed project and must determine the following, at a minimum:

- whether the proposed project achieves the project purpose and is consistent with public interest.
- whether there are alternative locations/size/configurations that would avoid and minimize adverse impacts.
- whether there is an alternative method of construction that would avoid and minimize adverse impacts.
- and whether there is a higher cost alternative that would avoid and minimize adverse impacts.

The following items outline several areas in which the analyses of feasible and prudent alternatives provided in the Draft WPP-EA and other applicant documents are deficient:

b) Alternatives Considered and Selection of a Preferred Alternative

- i) The alternative discussion in Section 5 of the draft WPP-EA addresses five discrete alternatives: do nothing, removal of low-head dams only, substrate enhancement with no dam removal, restoration of original rapids to former natural conditions, and the proposed action, removal of low-head dams with substrate enhancement.
 - (1) Alternative 5.2.1, Removal of Low-Head Dams Only, was eliminated from consideration because "...the removal of these features alone would not distribute the gradient of the reach in a designed way. Scour protection would be needed along bridges, utilities, stormwater outfalls, floodwalls and other infrastructure. Bedrock and glacial boulder that remain in the Project Area could be exposed; however, much of the boulder material was removed and some of the bedrock mined in the 1800s. This alternative would decrease the amount of Preferred Hydrophysical Habitat (PHH) for unionid mussels by 87 percent and would likely also reduce the number of mussels present within the reach. Because this alternative would degrade existing habitat and would not meet the proposed Project purpose of restoring aquatic habitat diversity in the Grand River, it was not considered further." However, distribution of gradient in a "designed way" is not an appropriate project purpose and has not been adequately determined to be a need for this project. No analysis to support the conclusions that scour protections would be needed or that this alternative would result in a decrease of PHH, negatively impact mussel communities in the reach, or cause degradation of existing habitat was provided. Provide a revised analysis of alternatives that more fully evaluates Alternative 5.2.1 as potential feasible and prudent alternative to the proposed action.
 - (2) Alternative 5.2.3, Restoration of Original Rapids to Former Natural Conditions, was eliminated from further considerations because, "The river in downtown Grand Rapids is currently confined to an armored channel that is approximately half of its estimated natural width. In addition, major developments along both sides of the riverfront render an expansion of the current channel width infeasible." Full restoration of the historic channel width and floodplain may not be feasible but does not necessarily preclude restoration of components of the original rapids located within the current channel footprint. Further, none of the alternatives carried forward for further analysis include restoration of the original channel width or floodplain, so it's not appropriate to eliminate only one alternative for this reason. Provide a revised analysis of alternatives that more fully evaluates Alternative 5.2.3 as a potential feasible and prudent alternative to the proposed action.
- ii) Page 7 of the Draft WPP-EA it states that "Three alternatives were identified and presented to United States Fish and Wildlife Services (USFWS) for impact determination: a no action alternative, a removal of four low-head dams without substrate enhancements, and a removal of four low-head dams with substrate enhancements within the Project Area (the proposed Project)." In the USFWS Biological Opinion (BO), the only analysis presented was of the Preferred option: removal of four low-head dams with augmentation of streambed. The applicant should provide the completed USFWS analysis of the other two alternatives listed in the Draft WPP-EA.

- iii) Page 44 of the draft WPP-EA states that “the purpose of the proposed project is to 1) restore aquatic habitat diversity and suitability for native Great Lakes drainage fish and mussel species, especially threatened, endangered, and special concern native species...” Please provide a monitoring and maintenance plan that would assess the project for success or failure in achieving the revised project purpose and ensuring that negative impacts are avoided and minimized.
- iv) The tables in Sections 5.3 and 5.5 of the WPP-EA only evaluate the no action alternative vs. the proposed action alternative. No other alternatives were included in these comparisons, making it impossible to evaluate which alternatives achieve the project purpose while avoiding and minimizing negative impacts to the aquatic ecosystem. A revised alternatives analysis should include the three remaining alternatives identified above, plus any additional alternatives identified that would vary location, size, and configuration of in-stream structures to avoid and minimize impacts.
- v) EGLE and Michigan Department of Natural Resources (MDNR) have suggested to project partners that alternative designs that emulate conditions found in naturally occurring rapids in Michigan, for example the St. Mary’s River in Sault Ste. Marie or the Boardman River near Beitner Road should be considered. Emulating conditions naturally found in Michigan, would increase the likelihood of enhancing the natural habitat and recreating conditions to which Michigan’s fish community has adapted. No such alternative was included in the WPP-EA. Alternative(s) that emulate naturally occurring rapids in the State of Michigan should be included in a revised alternatives analysis.
- vi) The fish passage report indicates that each low-head dam holds back approximately two feet of water. Accounting for the four low-head dams, project reach would experience approximately eight feet of fall over 2,756 feet of distance, resulting in a slope of approximately 0.3 percent. The BO indicates that the river drops 18 feet over one mile through downtown Grand Rapids, resulting in a slope of approximately 0.34 percent. This is similar to several high-gradient Michigan streams. For example, the St. Mary’s Rapids has a slope of approximately 0.5 percent. The range of alternatives evaluated should include a range of methods for distributing this gradient ranging from utilizing the existing substrate (no grade control structures) to the four proposed in-stream structures, including alternatives with varying frequency and magnitude of grade control structures.
- vii) In the Grand Rapids Sediment Investigation Report (141579.5), historic borings for bridges show fine to coarse sand and gravel overlaying shale and gypsum bedrock, sometimes 6-8 ft thick, and sometimes with cobble and gravel. Grain size analyses provided in the memo indicate the entire project area below 6th street dam is greater than or equal to 95 percent retained on the #200 sieve, thus not requiring further sediment contaminant testing.
 - (1) This sand and gravel with occasional areas of cobble and boulder are indicative of high-quality substrates typically found in Michigan’s large river and high gradient areas.
 - (2) Alternatives 5.2.2 and 5.2.3 were eliminated from further consideration and therefore did not evaluate how this existing substrate might sort out through the project area and provide more diversified habitat.

As discussed above, use of existing substrate as potential habitat enhancement should be considered.

viii) Regarding proposed riverbank access points, the correction request response letter states that "The proposed steps/access to the river cannot be achieved above the Ordinary High Water Mark (OHWM)" and includes minimal discussion of alternative locations up and down stream that were rejected. There is no consideration provided to a landward shift or to a reduction of the proposed impact area associated with P11 and P12. While the impact footprint in this area was corrected in the revised plans, Cross Section B25 is still not depicted at the widest point of impact as previously requested.

ix) Neither the application materials nor the alternatives analysis provided in the response letter clearly demonstrate the purpose of the proposed 0.3 mile long causeway when there are also multiple access ramps proposed along segments T2 and T10 that would provide access to all of the identified work areas within the cofferdams without the need to construct a road connecting them to the Low Head Dam removals at P1/T1 and P2/T3. Please provide justification for location, configuration and size of the proposed construction access structures. Additionally, please provide clarification as to why a causeway would be needed to access work areas along the west side of the river, but not along the east side.

c) Grade Control and Substrate Stability

i) State and federal law require that all negative impacts to the aquatic ecosystem are first avoided, then minimized, and finally mitigated. As such, the purpose and need for grade control structures must first be demonstrated before alternatives that include such structures are considered prudent. The alternatives analysis provided in the draft WPP-EA and substrate stability evaluation provided in Report 13C do not include any alternatives with no grade control structures, fewer grade control structures, or smaller grade control structures in the evaluation. In fact, when cross-referencing Figure 2 (Page 9) and Figure 4 (Page 12) of the report, it would appear that areas of the channel where no appreciable increase or decrease in shear stress is observed and no grading of the substrate is proposed, the Factor of Safety for substrate stability ranges from 3-4. As such, it has not been adequately demonstrated that the proposed in-stream structures are necessary for substrate stability. Therefore, the requirement to demonstrate avoidance and minimization of negative impacts has not been satisfied. The applicant should provide adequate analysis of alternatives that would determine the necessity for grade control structures; and, if deemed necessary, that the grade control structures have specifically been designed to avoid unnecessary impacts, then minimize unavoidable impacts, and provide adequate mitigation for any unavoidable impacts.

d) Impacts to Mussels and Mussel Habitat

i) USFWS, states in the BO, "...there is a significant amount of uncertainty regarding creation of aquatic habitat suitable for freshwater mussels. The actual project impacts and benefits to state and federally listed mussels cannot be anticipated given the complexities affecting the presence of mussel communities. It is uncertain what the actual as-built river features performance will be in terms of suitability for mussel-host fish presence and movements, substrate changes, maintenance activities, impact of new hydraulics on habitat..." This seems to directly contradict Table 5-2 of the WPP-EA, which indicates that the proposed action would cause an

increase in Preferred Hydrophysical Habitat (PHH) for unionid mussels of 73 percent when compared to the existing conditions in the no action alternative. Analyses and tables in this section of the WPP-EA should be revised to include all current areas of PHH that would be impacted by the proposed action as a decrease or take of PHH, given this USFWS position on PHH creation.

- ii) Section 4.6.1.1 Habitat of the revised Biological Assessment (BA, EcoAnalysts 2020) states that, "Unionid mussel habitat within the Construction Area is limited to pockets of softer substrate, as the high velocities encountered in the Construction Area regularly sweep away fine substrates during high flows, leaving primarily armored areas and larger boulder and cobble substrate with little sand. The limited areas protected from high water velocity offer the best mussel habitat and include a mixture of cobble, gravel and sand." However, according to the Substrate Stability Report and Sediment Transport Report, the proposed in-stream structures would be constructed using imported materials that are generally larger and more poorly graded than existing substrate and that sand materials imported from upstream sources would largely flush through the system at flows greater than 3,500 cubic feet per second (cfs). Provide clarification on how PHH would be expected to establish given these conditions.
- iii) Provide clarification on what flow rate or range of flow rates were analyzed during calculation of PHH in both the WPP-EA and supporting documents.
- iv) The USFWS snuffbox habitat suitability states that adult snuffbox mussels burrow deep in the sand, gravel and cobble substrates when not feeding or reproducing.
 - (1) It appears that existing conditions may provide the substrates necessary for snuffbox mussels to burrow.
 - (2) Alternatives 5.2.1 and 5.2.3 do not evaluate this type of substrate in regard to burrowing potential and how it benefits snuffbox mussels.
 - (3) Basis of Design 4.4.1 Materials shows crushed limestone being used under rounded alluvium. However, no evaluation of snuffbox mussel's ability to burrow into the proposed substrates is provided.

Provide revised alternatives analyses which evaluates current substrate vs. proposed imported substrate for burrowing of snuffbox mussels.

- v) Section 2.4.2 of the BA (EcoAnalysts 2020), states that Alternative 3a (preferred) increases PHH for snuffbox mussel. The PHH model looked at bed slope, substrate stability, area wetted, non-depositional areas, and lack of permanent structures. Provide clarification on whether or not this PHH analysis also evaluated substrate type and thickness for habitat suitability.
- vi) Page 8 of the USFWS BO indicates that limiting work in the wetted areas would limit direct harm to state and federally listed mussels. A revised alternatives analysis should include evaluation of extent of work in wetted areas and avoidance and minimization of impacts associated with working in wetted areas.

- vii) Section 5.3 of the WPP-EA states that, “A mussel habitat model was developed (River Restoration (RRO) and ESI 2017) and modified (RRO 2018 and EcoAnalysts 2020) to evaluate changes in PHH under the proposed Project, based on physical habitat conditions where unionids were most abundant between Ann Street and the 6th Street Dam. Factors that affect unionid distribution include substrate stability (measured as shear stress divided by critical shear stress), nonzero current velocity and turbulence under low flow conditions (allowing waste removal and delivery of oxygen, food, and calcium), adequate food (bacteria, phytoplankton), temperature conditions for reproduction (spawning, glochidia release from the female, and juvenile release from the host fish), good water quality (especially with respect to ammonia, heavy metals, and chlorine), and host fish availability.”

Only changes in hydrophysical habitat were evaluated by the model. The PHH parameters included bed slope < 10 percent, minimum velocities between 0.5 and 1.5 feet/second, substrate stability <1.2, and that the area must be wetted at 890 cfs and must not be a depositional sand area at 3,500 cfs. The proposed Project as designed would increase mussel PHH between the 6th Street Dam and Fulton Street by 73 percent over existing conditions (Table 5-2 and Figure 17; Appendix C). Over time, this should lead to more mussels in the area than under existing conditions.”

Per, Daniel et al 2018, host fish richness, stream discharge, urban land use and upstream dam density are key predictor in determining habitat suitability for mussels in Michigan streams. Provide revised analyses that consider these key factors.

- viii) The BA (EcoAnalysts 2020) states that, “Changes in unionid mussel habitat were evaluated by comparing available aquatic area (wetted areas under 890 cfs without sand deposition or permanent structures that unionids could occupy) and Preferred Hydrophysical Habitat (PHH; hydrophysical areas that unionids seem to prefer and should occur at higher densities) (Table 2-6). Unionid habitat is difficult to quantify. Factors that affect unionid presence and distribution include substrate stability (measured as shear stress divided by critical shear stress; shear ratio), some current velocity or turbulence under low flow conditions (allowing waste removal and delivery of oxygen, food, and calcium), adequate food (bacteria, phytoplankton), temperature conditions for reproduction (spawning, glochidia release from the female, and juvenile release from the host fish), good water quality (unionids are particularly sensitive to ammonia, heavy metals, and chlorine), and host fish availability (Wang et al., 2007; Strayer, 2008; Wang et al., 2010). Unionid mussels could be limited by any of the above factors, and not all of these factors were evaluated in the Project Area. Substrate in the Project Area is currently very coarse and compact, as the supply of smaller substrate (gravel, sand) entering this reach is limited, and existing scour potential is insufficient to move the armored larger substrate. Unionids were generally found in flow refugia near banks and downstream of structure (Figure 2-2 and 2-3). The Project would only affect physical habitat, which seems to be limiting, and only physical habitat is included in this analysis. However, other factors could also affect unionid colonization post-construction.”

Provide revised analysis that evaluate these listed factors within the project area for all potential feasible and prudent alternatives.

e) Impacts to Fish Communities and Habitat

- i) Revised alternatives analysis should include evaluation of fish passage for all potential feasible and prudent alternatives brought forward for consideration.

- ii) The applicants should explore alternatives that may provide desirable benefit to fish species, (as evaluated in a manner established in the fish passage report), while limiting and/or drastically reducing the disturbance of the stream bottom.
 - iii) Under Alternative 2, Basis of Design document 4.6.3.6 suggests that fish passage may not be improved or could be impaired if the tailwater elevation is increased at 6th Street Dam. Provide additional detail on what analyses were completed to support this statement, as most fish passing the dam currently utilize the fish ladder and very few are observed jumping over the dam.
 - iv) Table 6 of alternatives analysis summary shows that fish passage ranks four out of five for Alternative 2. Please provide the analyses to support this statement including analysis performed for the other four alternatives.
 - v) Appendix G – Fish Passage Hydraulics shows alternative one as having lower velocities compared to Alternative 2. If this is the case, Table 6 in the Basis for Design should rank alternative two as five rather than four. Please provide the analysis which supports this statement.
- f) Dam/Public Safety
- i) Basis for Design 4.6.5.7 addresses integrity and maintenance of existing infrastructure as part of the alternatives analysis. This section should be revised to include integrity and maintenance of proposed wave structures including any ongoing maintenance requirements for debris removal, ice damage, in-stream structure stability, and grouting of structures.
 - ii) The Basis for Design document 4.6.5.3 addresses public safety by removing dangerous hydraulics and rescue and recovery incidents at the four low head dams in the RCPP Reach of the river. However, the alternatives analysis does not evaluate public safety with the increase number of tubers, kayakers and waders that potentially will be attracted to this river segment or any increased need for swift water rescue. This section should be updated to include analysis of user safety and rescue needs for all alternatives evaluated.
 - iii) Provide water quality data that meets EGLE Water Quality standards for assessing risk of partial and total body contact.

Item 6: Assessment of Cumulative Impacts

The applicant's correction request response letter and accompanying documentation, provided to EGLE on January 4, 2021, indicate that cumulative impacts to wetlands have been analyzed in accordance with Part 303 requirements. However, the applicant does not appear to have addressed cumulative impacts to inland lakes and streams, as required under Part 301, Inland Lakes and Streams, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and Section 404 of the Clean Water Act. Further, the correction request response letter asserts that "The project is a stand-alone project that is not part of, or dependent upon, the completion of any other project." This is not an accurate representation of the "River for All" which includes significantly more work on the Grand River in Downtown Grand Rapids upstream of the proposed RCPP project. The WPP-EA provided with the application submittal is in draft form. A final version of WPP-EA is required in order to fully evaluate cumulative impacts of the proposed RCPP project and all planned future upstream projects.

The applicant should provide a revised WPP-EA including the following information:

- a) Assessment of cumulative and secondary impacts to the aquatic ecosystem of both the proposed RCPP project, the upstream "River for All" project, and any other known/currently planned projects along the Grand River in downtown Grand Rapids. As directed by EGLE staff previously, this assessment of cumulative impacts should be based on the most up to date design information and include the most impactful alternative being considered for future projects upstream of the RCPP reach.
- b) The WPP-EA is silent in regard to dredge and fill impacts that are not parts of the in-river features including the walkway and stairs that are proposed extending up to 26 feet waterward of the OHWM based on the cross sections provided. These impacts should be included in the revised WPP-EA.
- c) The impacts associated with the access causeway identified with T2 and T10 are also not addressed in the draft WPP-EA. These impacts should be included in the revised WPP-EA.

Item 7: Sediment Sampling

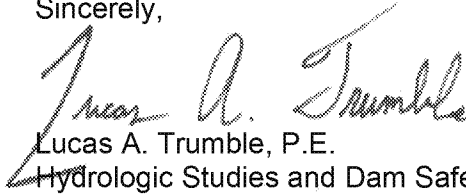
- a) EGLE's first correction request indicated that additional sampling and characterization of sediment in the project area, to project depth, would be required. This remains true for all areas where project depth was not reached in the initial sampling areas, should excavated sediment and substrate be reused within the project. As an alternative, all excavated material could be hauled off site and disposed of properly, in a landfill, and further sampling and characterization (outside of what would be required by the landfill) would not be required. If this alternative is pursued, project plans and specifications should be updated to include these provisions for handling and disposal. If not, additional sampling and characterization to project depth will be required. The presence of PFAS in sediment throughout the project area may limit the ability to reuse excavated sediments in the river.
- b) The presence of polyfluoroalkyl substances (PFAS) in the sediment may also necessitate National Pollutant Discharge Elimination System (NPDES) permitting for any dewatering activities discharging back to the river. Dewatering processes (e.g., dewatering of dredge spoils prior to disposal, pumping water out of the cofferdam) that generate effluent may require treatment to meet Water Quality Standards for perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) before being discharged to surface waters. If treatment is required, a NPDES permit will be required. To make this determination, WRD will require a bench scale test be conducted on representative sediment material to evaluate the potential quality of the effluent generated from these dewatering activities. For questions on bench scale sediment testing, please contact Lee Schoen, SchoenL1@Michigan.gov or 517-342-4500. NPDES permitting questions may be directed to Tarek Buckmaster, BuckmasterT@Michigan.gov or 517-230-4233. If another means of disposal of the effluent is pursued (e.g., discharge to a Publicly Owned Treatment Works (POTW)), the appropriate local permissions will be required.

Additional information and/or filing fees may be required upon further review of your application. Should we not receive the requested information from you within 30 days of this letter, we will consider your application as withdrawn and will close your application.

Fees are not refundable on applications once a decision has been made or if an action has been taken, such as closing an application due to no or incomplete response to a correction request letter, posting a public notice, or conducting a site visit. A new application may be submitted, but fees are not transferable.

If you have any questions regarding this letter or your application, please contact me at 517-420-8923 or TrumbleL@Michigan.gov; Send the requested information to me at EGLE, WRD, Hydrologic Studies and Dam Safety Unit, 525 West Allegan Street, 3rd Floor South Tower, Lansing, Michigan 48933. Please include Submission No. HNV-A018-7X9N3 in your response. The status of your application can be tracked online at <https://miwaters.deq.state.mi.us/miwaters/>.

Sincerely,

A handwritten signature in black ink, reading "Lucas A. Trumble". The signature is fluid and cursive, with the first name "Lucas" and last name "Trumble" clearly legible. The middle initial "A." is smaller and positioned between the first and last names.

Lucas A. Trumble, P.E.
Hydrologic Studies and Dam Safety Unit
Water Resources Division

Enclosures

cc: Mr. Michael Staal, P.E., City of Grand Rapids
Mr. Mario Fusco, Jr., P.E., EGLE
Ms. Audrie Kirk, EGLE
Ms. Bonnie Broadwater, EGLE